LISTING OF CLAIMS

The present listing of claims replaces all prior versions.

1 (CURRENTLY AMENDED). A player for reading data from an optical disc having data disposed along a spiral, said disc including a lead-in area containing lead-in data including the characteristics of the disc, comprising:

a controller generating a first command to rotate the optical disc in a first direction when the disc is first inserted into the player, wherein said disc has two data sides and is selected from a group consisting of:

a first disc in which said data is read in a first direction on a first side and a second direction on a second side; and

a second disc in which said data is read in the same direction on both sides;

a motor receiving said first command and rotating the disc in said first direction;

a first laser head positioned to read the data from the disc as the disc is rotated by the motor, wherein the disc has said lead-in area in one of two locations, in which said controller checks said two locations for said lead-in data;

wherein said controller is adapted to detect said lead-in data, and if no ~~data~~ lead-in data is detected after checking said two locations, the controller generates a second command for reversing the rotation of said disc; and

categorizes the disc based on said characteristics as being said first or said second disc.

2 (CANCELLED).

3 (CURRENTLY AMENDED) The player of claim 1 ~~wherein said disc has two data sides,~~ further comprising a second laser head, said first and second laser heads being positioned adjacent to respective sides of the disc.

4 (CURRENTLY AMENDED) The player of claim 3 wherein said first and second laser heads read data from said sides sequentially.

5 (CURRENTLY AMENDED) The player of claim 4 wherein said first and second laser heads read data from said sides simultaneously.

6 (CURRENTLY AMENDED) The player of claim 1 wherein said disc has a data side with at least two data layers, wherein said first laser head is adapted to read data selectively from one of said data layers.

7 (PREVIOUSLY AMENDED) The player of claim 1 further comprising a manual selector for the selection of the direction of said disc, said rotation detector being coupled to said manual selector and a display; and

wherein in response to said second command, said display provides instructions to a user.

8 (CURRENTLY AMENDED) A player reading data from a disc having at least one of two configurations, in one configuration the disc having data arranged along a right handed spiral on both sides of said disc, in the second configuration the disc having data arranged along a right handed spiral on one side and a left handed spiral on the other side of said disc, said disc further including a lead-in area with machine-readable rotation specific lead-in data indicating the proper direction of rotation and other characteristics of the disc, comprising:

a reader reading said machine readable rotation specific lead-in data from the disc to determine the proper direction of rotation of the disc;

a controller coupled to said reader and generating a command in response;

a first laser head positioned to read the lead-in data from the disc as the disc is rotated by a motor;

~~a~~ the motor receiving said command and rotating said disc in a corresponding direction, wherein said controller cooperates with said motor to rotate said disc in one of a first and second direction to determine the configuration of the disc.[[;]] ~~and~~

~~a first laser head positioned to read the lead-in data from the disc as the disc is rotated by the motor.~~

9 (CANCELLED).

10 (CURRENTLY AMENDED) The player of claim 8 wherein ~~said disc has a first and a second side, each side respective carrying data layers on its e sides~~ said disc having at least one data layer on said both sides further comprising a second laser head, said first laser head reading data from a first side of the disc and said second laser head reading data from the second side of the disc.

11 (ORIGINAL) The player of claim 8 wherein said motor rotates the disc in the same direction while data is being read from either side of the disc.

12 (ORIGINAL) The player of claim 8 wherein said motor rotates the disc in one direction when reading data from one side and the other direction when reading data from the other side.

13 (PREVIOUSLY AMENDED) The player of claim 8 wherein the disc includes at least two data layers on one side and said first laser head reads data selectively from said data layers.

14 (CANCELLED).

15 (PREVIOUSLY AMENDED) The player of claim 8 wherein said reader reads reverse data from the disc.

16 (CANCELLED)

17 (CURRENTLY AMENDED) A method of playing discs, each disc having a lead-in area with lead-in data describing characteristics of ~~the~~ each respective disc, said discs having data on both sides, and having one of a first configuration in which said data is arranged on both sides along a spiral in a same direction and a second configuration in which said data is arranged in one direction on one side and another direction on the other side, comprising:

inserting a disc in a player;

rotating ~~said disc in a predetermined direction~~ the disc in a first direction for the first side of the disc and rotating the disc in an opposite direction for the second side of the disc;

attempting to read the lead-in data from said disc in one of two locations as the disc is rotating in said ~~predetermined~~ first direction; ~~and~~

if the lead-in data cannot be read from said one of two locations of the disc, then generating a second command signal;

attempting to read the lead-in data from said disc in second location of said one of two locations as the disc is rotating in said opposite direction;

categorizing the disc based on said characteristics as having one of said first and said second configuration.

18 (CURRENTLY AMENDED) The method of claim 17 wherein in response to said second command, instructions are presented to the user.

19 (PREVIOUSLY PRESENTED) The method of claim 17 further comprising rotating the disc in a predetermined direction for either side of the disc.

20 (CANCELLED)

21 (CURRENTLY AMENDED). The player of claim 17 wherein in response to said second command, said display generates instructions for a user to activate ~~said~~ a manual selector.

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22 (PREVIOUSLY PRESENTED). The player of claim 1 further comprising a display, wherein in response to said second command, said display shows instructions for a user to remove the disc and reverse it.

23 (PREVIOUSLY PRESENTED). The player of claim 1 wherein in response to said second command the motor reverses the direction of rotation of the disc.

24 (CURRENTLY AMENDED). The player of claim 8 wherein said machine readable rotation specific lead-in data is selected from the group consisting of BCA type coding and bar coding.

25 (PREVIOUSLY AMENDED). The player of claim 35 wherein said special data includes a signal having a predetermined signal with a predetermined shape and said controller checks said shape to determine the direction of rotation for the disc.

26-30 (CANCELLED).

31 (PREVIOUSLY PRESENTED). The method of claim 18 further comprising automatically reversing the rotation of the disc in response to said control signal.

32 (CANCELLED).

33 (CURRENTLY AMENDED). The apparatus of claim 1 wherein said disc has a hub and a periphery and said lead-in area is disposed adjacent to one of said hub and said periphery.

34 (CANCELLED).

35 (CURRENTLY AMENDED). A player for reading data from an optical disc having data disposed along a spiral, said disc including a main data area and an auxiliary data area used for special data including one of a lead-in data,

BCA type coding data and a bar code formed of bars and spaces, said player comprising:

a controller generating a first command to rotate the optical disc in a first direction when the disc is first inserted into the player, wherein said disc has two data sides;

a motor receiving said first command and rotating the disc in said first direction;

a first laser head positioned to read the data from the disc as the disc is rotated by the motor, wherein the disc has said special data in one of two locations on both sides of the disc in which said controller checks said two locations for said special data;

wherein[[,]] said controller is adapted to detect said special data and if no special data is detected after checking said two locations, the controller generates a second command for reversing the rotation of said disc; and

said controller categorizing the disc based on disc characteristics, wherein the disc is categorized as at least one of a plurality of disc types including:

a first disc wherein the data is found on both sides of the first disc;

a second disc wherein reverse data is found on said both sides; or

a third disc wherein the data is found on one side and said reverse data is found on the other side; and

said controller further categorizing based on the direction of rotation for reading said disc.

36 (NEW). The player of claim 8 wherein said disc has a lead-in area on both sides and wherein said controller reads both said lead-in areas to categorize said disc.